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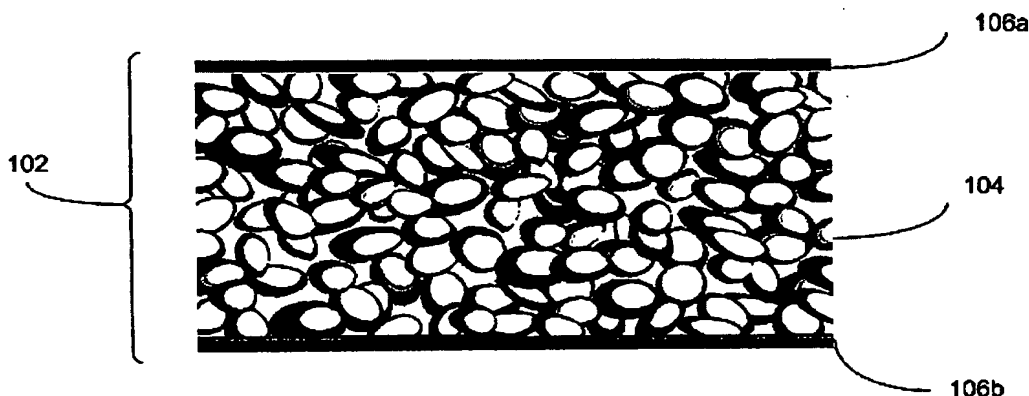
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[Continued on next page]

(54) Title: FOAMED PET PACKAGING



(57) Abstract: This invention provides packages and containers (201) produced by a solid state method for the manufacture of foam polymeric material (204). The packages are suitable for pre-cooking or sterilization, insulated transport, cooking vessel, reheating, and storage of food. The gas impregnated thermoforming (GIT) process includes interleaving an article of raw polymeric material with a gas channeling means; exposing the article to a non-reacting gas at elevated pressure to achieve a desired concentration of gas within the polymer (204), thereby forming a partially gas-saturated article (201), separating it from the gas channeling means, the decompressing, foaming and forming it at a temperature below the material's melt temperature; and finally trimming it to produce a finished foamed polymeric material (204) and recycleable scrap solid state process foamed polymer.



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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE,

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B29D 22/00, 23/00; B32B 1/08; C08J 9/00; B29C 65/00
US CL : 428/36.5; 521/79; 264/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 428/36.5, 35.7, 304.4; 521/79, 146, 182, 180; 264/50, 41, 232

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | US 5,684,055 A (KUMAR et al) 04 November 1997 (04.11.1997), columns 3-4. | 1-37 |
| A | US 3,955,482 A (MOEN) 11 May 1976 (11.05.1976), columns 2-5. | 1-37 |
| A | US 5,835,657 A (SUAREZ et al) 10 November 1998 (10.11.1998), columns 6-9. | 1-37 |

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☐ See patent family annex.

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